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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,620	02/19/2004	Jacobus C. Haartsen	0110-001	3162

7590 11/15/2007

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EXAMINER	
TAYLOR, BARRY W	
ART UNIT	**PAPER NUMBER**
2617	

MAIL DATE	DELIVERY MODE
11/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/780,620	HAARTSEN, JACOBUS C.	
	Examiner	Art Unit	
	Barry W. Taylor	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 September 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-47* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 February 2004* is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *4/11/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The amendments to the specification spanning lines 10-26 on page 16 are approved and entered by the Examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-9, 24-32 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Orava (6,829,288) in view of Awater et al (2002/0110105 hereinafter Awater).

Regarding claim 24. Orava teaches an apparatus for determining whether to indicate reception of an access code in a receiver operating in a communications system, comprising:

logic that receives a signal (title, abstract, figures 1-9, col. 4 line 13 – col. 5 line 67, col. 7 lines 40-54, col. 8 lines 19-67, col. 9 lines 1-43, col. 13 lines 47-61);

logic that generates a correlation value by correlating the received signal with a reference code (abstract, col. 4 lines 26-31, col. 6 lines 31-35, col. 7 lines 1-57, col. 8 lines 19-60, col. 9 lines 32-43, col. 9 lines 56-62, col. 10 lines 2-3, col. 11 lines 8-14, col. 12 lines 1-26, col. 13 lines 27-61, col. 14 lines 15-21);

logic that sets a threshold level to a first value if the receiver is in a scan mode;

logic that sets the threshold level to a second value if the receiver is in a traffic mode, wherein the second value corresponds to a lower degree of correlation than the first value;

logic that compares the correlation value with the threshold level (abstract, col. 4 lines 26-31, col. 6 lines 31-35, col. 7 lines 1-57, col. 8 lines 19-60, col. 9 lines 32-43, col. 9 lines 56-62, col. 10 lines 2-3, col. 11 lines 8-14, col. 12 lines 1-26, col. 13 lines 27-61, col. 14 lines 15-21); and

logic that indicates reception of the access code only if the correlation value compares favorably with the threshold level (abstract, col. 4 lines 26-31, col. 6 lines 31-35, col. 7 lines 1-57, col. 8 lines 19-60, col. 9 lines 32-43, col. 9 lines 56-62, col. 10 lines 2-3, col. 11 lines 8-14, col. 12 lines 1-26, col. 13 lines 27-61, col. 14 lines 15-21).

Orava does not explicitly show logic that sets a threshold level to a first value if the receiver is in a scan mode and logic that sets the threshold level to a second value if the receiver is in a traffic mode, wherein the second value corresponds to a lower degree of correlation than the first value.

Awater also teaches in Bluetooth environment and improves on the roaming procedure for mobile devices when switching from one access point to another by applying a weight (i.e. threshold level) to an equation to be used by the mobile device wherein the weight depends on the state the mobile device is in (i.e. connect state reading on traffic mode or scan state reading on scan mode) thus allowing the mobile to switch to an access point that provides the best overall quality (paragraphs 0089 - 0091, 0110). The Examiner notes that paragraphs 0089 and 0119 disclose that the connect

state **may have** a weight value larger than the scan state which is an obvious design choice.

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the invention as taught by Orava to assign weights as taught by Awater so that the network device can switch to the access point that provides the best overall quality.

Regarding claim 1. Method claim 1 is rejected for the same reasons as apparatus claim 24 since the recited apparatus would perform the claimed method steps.

Regarding claim 47. Program claim 47 is rejected for the same reasons as apparatus claim 24 and method claim 1 since the recited apparatus and method would perform the claimed program steps.

Regarding claims 2, 4, 25, and 27. Orava teaches correlating by multiplying (see figure 3, col. 11 line 53 – col. 12 line 55).

Regarding claims 3, 5, 26, and 28. Orava teaches correlating by XORing (col. 13 lines 47-61).

Regarding claims 6-8 and 29-31. Orava teaches correlating incoming access code to determine protocol of channel (see abstract and items 33 and 34 figure 3).

Regarding claims 9 and 32. Orava teaches values derived (figures 5b and 5c) from access code (figure 5a) may be used. Applicants specification also discloses any values could be used.

3. Claims 22-23 and 45-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Orava (6,829,288) in view of Awater et al (2002/0110105) further in view of Awater et al (2005/0152317).

Regarding claims 22-23 and 45-46. Orava in view of Awater (2002/011015) do not show using threshold values to allow the receiver to accept false alarms.

Awater also teaches packet detection in Bluetooth environment (abstract, paragraphs 0001 – 0009, 0029, 0035 – 0042, 0048 – 0050, 0055) wherein threshold values are used to detect false alarms (paragraph 0091 – 0092) since false alarms would cause the receiver to become deaf to incoming packets for a certain time.

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the invention as taught by Orava in view of Awater (2002/0110105) to correlate to thresholds as taught by Awater (2005/0152317) so that symbol detection of access codes become more accurate by selecting thresholds with sufficiently small false alarm probability as taught by Awater.

4. Claims 10-21 and 33-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Orava (6,829,288) in view of Awater et al (2002/0110105) and Awater et al (2005/0152317) further in view of Brommer (2003/0026356).

Regarding claims 10-21 and 33-44. Orava in view of Awater (2002/0110105) and Awater (2005/0152317) do not show the second value is dynamically determined and adjusted as a function of QoS.

Brommer teaches in the Bluetooth environment (title, abstract) wherein QoS is used to dynamically assign communication channels (paragraphs 0022, 0089 – 0104).

It would have been obvious for any one of ordinary skill in the art at the time of invention to consider interference and noise as taught by Brommer into the teachings of Orava in view of Awater (2002/0110105) and Awater (2005/0152317) so as to dynamically assign communication channels to wireless devices while maximizing the effective bandwidth.

Response to Arguments

5. Applicant's arguments with respect to claims 1-47 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry W. Taylor, telephone number (571) 272-7509, who is available Monday-Thursday, 6:30am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost, can be reached at (571) 272-7872. The central facsimile phone number for this group is **571-273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (571) 272-2600, the 2600 Customer Service telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Centralized Delivery Policy: For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the central fax number (**571-273-8300**).

Barry W. Taylor

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Barry W. Taylor
Art Unit 2617

Barry W. Taylor 11/9/07

BARRY TAYLOR
PRIMARY EXAMINER